Chapter 5:

Enlisting Help From Experts

Many aspects of wetland conservation will require assistance from technical experts. Some of this assistance may be provided free by government agencies. You also can look for volunteer help from local environmental organizations, colleges and universities, and private contractors.

Following is a list of some of the types of experts that you may need to work with in order to measure the wetland's functions and values, and monitor these over time.

Biologist - There are many specific kinds of biologists, and you may need the services of several different ones, depending on your situation. In general, biologists can help you identify the wildlife species (mammals, birds, fish, amphibians) that use the wetland. State and federal natural resources agencies are probably the best source for biologists. A local Audubon chapter or birding club might be a good source for bird identification, and environmental consulting firms and universities should be able to provide the other expertise.

Botanist - A botanist is critical for identifying the plants and plant communities that occur in the wetland, especially if there are threatened or endangered species present. Botanists can be found in state and federal natural resources agencies, universities, environmental consulting firms, and garden clubs. The Indiana Native Plant and Wildflower Society (INPAWS) may also know of botanists in your area. Contact INPAWS at 3134 North Greenbriar Lane, Nashville, IN 47448.

Chemist - A chemist can conduct tests of water quality in the wetland. You should try to have samples taken periodically to assess the water quality over time. Chemists can be found at universities, water quality agencies, water treatment plants, and bottled water companies.

Hydrologist - A hydrologist is critical for providing an understanding of the water cycle occurring in your wetland. Is the wetland fed by surface water only, or does groundwater play a role? Hydrologists can be found at universities, state and local water resources agencies, the U.S. Army Corps of Engineers, and private consulting firms.

Soil Scientist - The soil in an area can tell a lot about how the land was used in the past, and how the wetland is currently functioning. All of Indiana's soils have been mapped, and the Natural Resources Conservation Service can provide maps and interpretations of the maps. Soil scientists can be found at the NRCS, county extension offices, private consulting firms, and universities.

The Limberlost Experience – Getting Help From The Experts

Coordinator Ken Brunswick describes the experts who have helped with wetland conservation efforts of the Limberlost Pilot Focus Area.

Biologists

Personnel from the U.S. Fish and Wildlife Service have visited the Limberlost Pilot Focus Area many times, and have provided a wealth of information on wildlife and plant species, and wetland restoration techniques. We've also received

help from the Indiana Department of Natural Resources and the USDA Natural Resources Conservation Service. A biology student from Ball State University in Muncie is currently in the middle of an aquatic insect study on our restored wetlands. This study will give us baseline information on the insects using our wetlands.

Botanists

Kevin Tungesvick from Spence Nursery in Muncie has visited the Limberlost on several occasions, providing seed and expertise. We followed his recommendations to seed native plants on 15 acres of our preserve. He also provided information on invasive species removal and has participated in a native grass field day. Other botanists who have helped with field days or provided information have been from the DNR Division of Nature Preserves, the USDA Natural Resources Conservation Service, and the DNR Division of Fish and Wildlife.

Hydrologists

We have recently begun discussions with U.S. Geological Survey to study the flow of the aquifer that lies below the Limberlost Swamp. We are interested in finding out where the water goes, how fast it moves, which communities use it, etc. Once we have this information, we can use it to promote the water quality and groundwater recharge benefits of our wetlands to the local communities.

A Ball State University student studied a 2.5-acre wetland in the Loblolly Marsh Wetland Preserve and its 13-acre watershed.He determined the inflow of water to the wetland after precipitation. Studies such as this tell us how much water the wetlands are keeping from reaching the local drainage ditches and rivers.

Help from History

Universities, local libraries, and long-time residents of your area can be invaluable sources of information about the history of the wetlands in your focus area. Try to learn as much as you can. This knowledge will help you when you're speaking with local landowners, civic organizations, and school groups. If your wetlands have some historical significance, it can benefit your efforts tremendously.

The Limberlost Experience – Putting History To Work

Gene Stratton-Porter is an internationally known novelist who began her career in Geneva, Indiana, with nature stories and novels about the vast Limberlost Swamp. At least half of her books were written locally. Mrs. Porter's home in Geneva is a state historic site that attracts visitors from around the country and overseas. These visitors will often donate a "Foot of Swamp" to the Limberlost wetland restoration program. The international historical notoriety of the site gives wetland conservation efforts in the Limberlost a tremendous boost. The Focus Area Team ties as much of its work as possible to the state historic site and to the life and times of Gene Stratton-Porter. Mrs. Porter's life and writings give many people inspiration to take better care of their natural resources, including wetlands.

A Picture is Worth a Thousand Words

If you are conducting restorations or other work on the ground, take photographs of your efforts. For instance, if you are digging trenches to locate subsurface tile, photograph the walls of these trenches. They show the layers of soil, and these layers can tell you a lot about the history of your wetland, including (possibly) how much soil has eroded into your wetland. Photograph the animals, plants, and the yearly cycles of your wetland. Be sure to photograph your restoration work before and after completion. You can't take too many pictures. Experts can help you interpret the pictures, and they are often very useful in your I & E efforts, as well.

The Limberlost Experience - Give It The "Old College Try"

Pilot Focus Area Coordinator Ken Brunswick has worked extensively with Ball State University (BSU) in Muncie, and he is a strong proponent of enlisting the help of a local university or college to increase your overall knowledge of your wetland. Following is a list of the assistance the Limberlost has received from BSU.

- Graduate students from BSU's Natural Resources Environmental Management program have completed geographic information system (GIS) watershed work and a watershed study of the inflow of water to Limberlost wetlands after precipitation.
- A graduate student in the Landscape Architecture program developed two displays depicting the past, present, and future of the Loblolly Marsh Wetland Preserve in the Limberlost Pilot Focus Area.
- An undergraduate student is presently conducting an aquatic insect study in the Limberlost.
- The BSU Telecommunications Department produced two videos on the Limberlost: *A Walk in the Woods* and *Voice of the Limberlost*. Both of these videos are available from the Limberlost State Historic Site, P.O. Box 356, Geneva, IN 46740.
- Dr. Hugh Brown and Dr. Kemuel Badger have conducted classes in the Limberlost wetlands studying the soils, vegetation, and hydrology.

Yellow warbler